



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

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Secretary

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January 22, 2015

Mr. Daniel Como
UniFirst Corporation
295 Parker Street
Springfield, MA 01151

RE: *SPRINGFIELD*
Transmittal No.: X253813
Application No.: *WE-14-026*
Class: *SM25*
FMF No.: *130240*
**AIR QUALITY PLAN
APPROVAL**

Dear Mr. Como:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Air and Waste, has reviewed your Limited Plan Application (“Application”) listed above. This Application concerns the existing unapproved equipment at your facility located at 295 Parker Street, Springfield, MA 01151 (“Facility”).

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 “Air Pollution Control” regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP’s review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner / operator (Permittee) must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

UniFirst Corporation (the Permittee) operates an existing industrial laundering facility at the Facility that processes soiled shop towels and other textiles. The shop towels may contain substances, such as solvents and oil, which emits volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). The primary sources of VOCs and HAPs emissions from laundering shop towels at the Facility include seven (7) washing machines that vent into the washroom. Washer emissions are released to the outdoor air through roof and wall fans in the washroom. Other emission sources include four (4) dryers that vent the heated air through a perforated metal tumbler to dry the wet textiles then through a lint trap before being vented to the atmosphere. The wastewater treatment (WWT) system and equalization tank vent into the WWT room with the room air vented outdoors through roof and wall fans. Wastewater trenches, settling pits and equalization tank are covered to minimize emissions. Wastewater from washers is pre-treated in the WWT.

UniFirst's Portland, Maine facility conducted emission testing in December 2012 in accordance with an EPA-approved protocol pursuant to USEPA's testing order. The results of testing indicated that VOCs and HAPs are emitted from washers, dryers, and the waste water treatment system due to laundering of shop towels. VOCs and HAPs emission factors were developed based on the Portland emission testing and are applied to the Springfield facility.

A Consent Agreement and Final Order (CAFO), Docket No. CAA-01-2014-0010, was finalized between the USEPA Region 1 and UniFirst Corporation on May 21, 2014. The operational/production limits, monitoring and testing requirements, record keeping requirements, reporting requirements, and special conditions from the CAFO have been incorporated into this Final Approval.

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)
EU1	Washer Model Braun 600NOLUPDV	650 lbs dry laundry ¹	None
EU2	Washer Model Braun 600NOLUPDV	650 lbs dry laundry ¹	None
EU3	Washer Model Braun 600NOLUPDV	650 lbs dry laundry ¹	None
EU4	Washer Model Braun 600NOLUPDV	650 lbs dry laundry ¹	None
EU5	Washer Model Braun 400NOLUDP	450 lbs dry laundry ¹	None
EU6	Washer Model Braun 200NOLUPDP	250 lbs dry laundry ¹	None
EU7	Washer Model Milnor 42026V6J	125 lbs dry laundry ¹	None

Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)
EU8	Dryer Model Challenge CPG8-SN4L	600 lbs dry laundry	None
EU9	Dryer Model Challenge CPG-4002L	400 lbs dry laundry	None
EU10	Dryer Model Challenge CPG-4002L	400 lbs dry laundry	None
EU11	Dryer Model Milnor170	170 lbs dry laundry	None
EU12	WWT system including Equalization Tank	200 gallons per minute	None

Table 1 Key:

EU = Emission Unit

= Number

lbs = Pounds

¹ no more than 2.0 times the manufacturer's design dry laundry washer capacity in any single load and less than 1.7 times the manufacturer's design dry laundry capacity for each washer averaged over any consecutive twelve month rolling period.

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION AND EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2, below:

Definitions:

Shop Towel – a piece of cotton fabric or other material that is used to clean equipment, parts, objects or surfaces of general soil, grease or oil.

Print Towel – a piece of cotton fabric or other material, received from a customer whose SIC Code is 27 (NAICS Code 323) or whose business is otherwise identifiable as printing or graphic arts, that is used to clean printing equipment, parts, objects or surfaces.

Furniture Towel – a piece of cotton fabric or other material, received from a customer whose SIC Code is 25 (NAICS Code 337) or whose business is otherwise identifiable as wood furniture manufacturing or refinishing, that is used in the cleaning, finishing or refinishing of wood furniture.

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit
EU1 – EU7	Soiled shop towel load sizes on a 12 month rolling average of no more than 1.7 times the manufacturer’s design dry laundry capacity for each washer.	N/A	N/A
	Maximum soiled shop towel load size of no more than 2.0 times the manufacturer’s design dry laundry capacity in any single washer load.		
EU1 – EU12	Maximum of 2,160,000 pounds of soiled shop towels per rolling 12-month period, based on a shop towel emission factor of 8.3 pounds of VOC per 1000 pounds of soiled shop towels	VOCs	3.0 TPM 9.0 TPY
		HAPs (total)	0.5 TPM 1.6 TPY
Facility-wide ¹	N/A	VOCs	3.3 TPM 9.7 TPY
		HAPs (total)	0.6 TPM 1.9 TPY

Table 2 Key:

EU# = Emission Unit Number

VOCs = Volatile Organic Compounds

Total HAPs = Total Hazardous Air Pollutants

TPM = tons per month

TPY = tons per any consecutive 12-month period

N/A = Not Applicable

¹ Facility-wide emission limits include combustion emissions that do not have applicable permitting requirements.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3	
EU#	Monitoring and Testing Requirements
EU1 – EU7	1. The Permittee shall monitor the soiled shop towel weight per washer load for each washer such that records can be maintained of the Facility's emissions of VOCs and total HAPs to determine compliance status with the emission limits detailed in Table 2 above.
EU1 - EU12	2. The Permittee shall monitor operations so that if any upset occurs with EU1 - EU12, the Permittee shall safely discontinue operation of all associated emission unit(s) until the device(s) in question is repaired and operating properly.
	3. The Permittee shall monitor all maintenance related activities that may affect air contaminant emission rates.
Facility-wide	4. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	5. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.

Table 3 Key:

EU# = Emission Unit Number

VOCs = Volatile Organic Compounds

Total HAPs = total Hazardous Air Pollutants

MassDEP = Massachusetts Department of Environmental Protection

USEPA = United States Environmental Protection Agency

Table 4	
EU#	Record Keeping Requirements
EU1 – EU7	1. The Permittee shall keep records to demonstrate that soiled shop towel load sizes on a 12 month rolling average is no more than 1.7 times the manufacturer's design dry laundry capacity for each washer.
	2. The Permittee shall keep records to demonstrate that no single soiled shop towel load size is more than 2.0 times its manufacturer's design dry laundry capacity for each washer.
	3. The Permittee shall keep records to demonstrate that no more than 2,160,000 pounds of soiled shop towels per rolling 12-month period are laundered.

Table 4	
EU#	Record Keeping Requirements
Facility-wide	<p>4. The Permittee shall maintain current copies of the following records on-site and have them available for MassDEP or USEPA inspection upon request:</p> <p>a. Definitions of shop, print and furniture towels and written procedures at a visible location for the Facility employees and managers who handle or are otherwise responsible for towel laundering to ensure that the Facility <u>shall not</u> launder:</p> <p>i) print towels;</p> <p>ii) furniture towels; or</p> <p>iii) shop towels containing free liquids.</p> <p>b. Training materials regarding shop towel handling procedures, and records demonstrating that all current employees who handle shop towels or who are otherwise responsible for towel laundering, have been trained on proper handling procedures;</p> <p>c. Wash formula for shop towels; and</p> <p>d. Soiled shop towels throughput records, including washer load size records per load as well as on a monthly and 12-month rolling basis so as to comply with the production and emissions limits contained in Table 2 above.</p>
	<p>5. The Permittee shall keep the most updated training materials and records, including the names of trained employees who are responsible for towel sorting and laundering, at a convenient onsite location.</p>
	<p>6. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/dep/air/approvals/aqforms.htm#report.</p>
	<p>7. The Permittee shall maintain records of monitoring and testing as required by Table 3.</p>
	<p>8. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up to date SOMP for EU1 - EU12 approved herein on-site.</p>
	<p>9. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU1 - EU12. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.</p>
	<p>10. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU1 - EU12, and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.</p>

Table 4	
EU#	Record Keeping Requirements
	11. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
Facility-wide	12. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	13. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 4 Key:

EU# = Emission Unit Number

SOMP = Standard Operating and Maintenance Procedure

MassDEP = Massachusetts Department of Environmental Protection

USEPA = United States Environmental Protection Agency

Table 5	
EU#	Reporting Requirements
Facility-wide	1. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	2. The Permittee shall notify the Western Regional Office of MassDEP, BAW Permit Chief by email at (wero.air@state.ma.us) or fax at 413-784-1149 as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to Permit Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	3. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30 days from MassDEP’s request.
	4. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.
	5. The Permittee shall submit to MassDEP a final stack emission test results report, within 60 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.

Table 5 Key:

EU# = Emission Unit Number

CMR = Code of Massachusetts Regulations

MassDEP = Massachusetts Department of Environmental Protection

BAW =Bureau of Air and Waste

3. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6	
EU#	Special Terms and Conditions
EU1 - EU11	1. The Permittee <u>shall not</u> launder: (i) print towels, (ii) furniture towels. The Permittee <u>shall not</u> launder shop towels containing free liquids.
	2. The Permittee shall keep soiled shop towels received at the Facility in sealed bags or covered containers until the towels are sorted for washing.
	3. The Permittee shall generally launder soiled shop towels received that same day. Soiled shop towels that are not laundered on the same day or night of receipt shall be stored in sealed bags or closed containers in a covered area of the laundry building.
	4. If the Permittee receives at the Facility any (i) print towels, (ii) furniture towels, or (iii) any shop towels containing free liquids, the Permittee shall store such prohibited towels in closed containers or sealed bags in a covered area of the laundry building and transport these towels off-site for handling in accordance with applicable environmental laws.
EU12	5. The Permittee shall keep wastewater trenches (beyond the discharge point for washing machines), settling pits, and equalization tanks covered at all times except when access is required for maintenance or sampling. This provision does not apply to plumbing vents installed on such trenches, pits, and tanks.
Facility-wide	6. The Permittee shall maintain the most updated written training materials for managers and laundering staff, which include specific instructions for handling any print, furniture, or non-compliant shop towels that are received at the facility.
	7. The Permittee shall maintain the most updated written training materials for managers and laundering staff and provide training to all employees responsible for shop towel laundering, regarding proper procedures for sorting, transporting, receiving, storing, processing, washing, and drying shop towels.
	8. The Permittee shall maintain on site a written standard operating procedure for determining whether a customer is generating shop, print, and/or furniture towels.
	9. The Permittee shall not receive from a customer's location shop, print, and/or furniture towels that contain free liquids.
	10. The Permittee shall label each emission unit (EU) approved herein for proper monitoring, recordkeeping, and reporting purposes.

Table 6	
EU#	Special Terms and Conditions
Facility-wide	11. The Permittee shall modify the dryer stacks (EU8 – EU11) to discharge the exhaust gases vertically and shall not be equipped with any part or device that restricts the exhaust flow vertically. These modifications shall be completed by July 1, 2015. Within seven (7) days of the completion of these modifications, the Permittee shall send notification and photograph of each modified stack to MassDEP Western Regional Office by e-mail at (wero.air@state.ma.us).

Table 6 Key:

EU# = Emission Unit Number

B. The Permittee shall utilize an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters”. The Permittee shall utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU#	Stack Height Above Ground	Stack Inside Exit Dimensions	Exhaust Gas Exit Velocity Range	Exhaust Gas Exit Temperature Range
EU8 EU9 EU10	32 feet	2.0 feet	20 - 40 feet per second	110 - 180 °F
EU11	32 feet	2.0 feet	15 - 30 feet per second	110 - 180 °F

Table 7 Key:

EU# = Emission Unit Number

°F = Degrees Fahrenheit

GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).

- B.If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C.If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D.Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and/or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E.This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F.Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G.Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H.This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I.This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J.Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval. Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact Mr. Dhiraj Desai by telephone at 978-694-3282, or in writing at the letterhead address.

Sincerely,

This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.

Dhiraj B. Desai
Environmental Engineer

This final document copy is being provided to you electronically by the
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Susan P. Ruch
Deputy Regional Director
Bureau of Air and Waste

cc: Department of Health and Human Services, 95 State Street, Springfield, MA 01103
Fire Department, 1535 Roosevelt Ave, Springfield, MA 01109
Geosyntec Consultants, 289 Great Road, Acton, MA 01720, Attn: Peter Anderson
MassDEP/Boston (E-Copy) - Yi Tian
MassDEP/NERO (E-Copies) – Marc Altobelli, Ed Braczyk, Mun Wong
MassDEP/NERO (Hard Copy) – Mary Persky
MassDEP/WERO (E-copy) – Marc Simpson
EPA Region-1 (E-Copy) – Christine Sansevero